

What is claimed is:

1. An imaging apparatus, comprising:

a color image pick-up device constituting an image in one frame by
5 a plurality of fields for imaging an image of an object and having an
output capable of carrying out a playback of an image in each of said
fields;

a driving circuit for driving the color image pick-up device;

a timing generating circuit for generating a drive timing of said
10 color image pick-up device; and

a signal processing device for processing an output signal of said
color image pick-up device,

wherein pixels which are in same color in each of said fields are
added when a luminance of said image of the object is determined to be
15 low and when a difference of the luminance between outputted images
which are in adjacent fields of said color image pick-up device is
determined to be less from a result of comparing said outputted images.

2. An imaging apparatus, comprising:

20 a color image pick-up device constituting an image in one frame by
a plurality of fields for imaging an image of an object and having an
output capable of carrying out a playback of an image in each of said
fields;

a driving circuit for driving the color image pick-up device;

25 a timing generating circuit for generating a drive timing of said
color image pick-up device; and

a signal processing device for processing an output signal of said

color image pick-up device,

wherein pixels which are in same color in each of said fields are added after re-exposing a next field which is next of adjacent fields of said color image pick-up device when a luminance of said image of the object is determined to be low and when a difference of the luminance between outputted images which are in said adjacent fields of said color image pick-up device is determined to be less from a result of comparing said outputted images.

3. The imaging apparatus according to claim 2, further comprising a variable clock generator capable of generating multiple clock frequency for said timing generating circuit;

wherein the pixels which are in the same color in each of said fields are added after lowering a speed of a clock frequency of said timing generating circuit and re-exposing the next field which is the next of the adjacent fields of said color image pick-up device when the luminance of said image of the object is determined to be low and when the difference of the luminance between the outputted images which are in said adjacent fields of said color image pick-up device is determined to be less from the result of comparing said outputted images.

4. The imaging apparatus according to claim 1, wherein said color image pick-up device is operated only when a size of a file which can be played in one field is selected.

5. The imaging apparatus according to claim 1, further comprising a device for selecting whether or not to add pixels at a time of low

luminance which is capable of selecting whether or not to add the pixels which are in the same color in each of said fields.